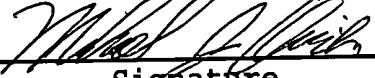


EXECUTION PAGE FOR DECLARATION FOR UTILITY PATENT APPLICATION

First Named Inventor: O'Brien, Michael J.      Attorney Docket Number: D497

NAME, ADDRESS, and SIGNATURE OF THE SOLE OR FIRST INVENTOR:

PRINTED NAME:      Michael      James      O'Brien  
                         1st Given Name      2nd Middle Name      Last Surname

 , Date: September, 30, 2003  
Signature

A U.S. Citizen. Address:      8032 Loyaloa Blvd.      ,  
   Street Address  
Los Angeles      ,      California      ,      90045,      USA  
City      State      Zip      Country

NAME, ADDRESS, and SIGNATURE OF THE SECOND INVENTOR:

PRINTED NAME:      Benjamin      ,      Allen      ,      Nelson  
                         1st Given Name      2nd Middle Name      Last Surname

 , Date: September, 30, 2003  
Signature

A U.S. Citizen. Address:      1926 West 66th Street      ,  
   Street Address  
Los Angeles      ,      California      ,      90047,      USA  
City      State      Zip      Country

NAME, ADDRESS, and SIGNATURE OF THE THIRD INVENTOR:

PRINTED NAME:      ,      ,      ,  
                         1st Given Name      2nd Middle Name      Last Surname

\_\_\_\_\_, Date: \_\_\_\_\_  
Signature

A U.S. Citizen. Address: \_\_\_\_\_  
   Street Address  
\_\_\_\_\_,      ,      ,      ,      USA  
City      State      Zip      Country

NAME, ADDRESS, and SIGNATURE OF THE FOURTH INVENTOR:

PRINTED NAME:      ,      ,      ,  
                         1st Given Name      2nd Middle Name      Last Surname

\_\_\_\_\_, Date: \_\_\_\_\_  
Signature

A U.S. Citizen. Address: \_\_\_\_\_  
   Street Address  
\_\_\_\_\_,      ,      ,      ,      USA  
City      State      Zip      Country

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

POWER OF ATTORNEY IN RE PATENT APPLICATION OF:

First Named Inventor: O'Brien, Michael J. Attorney Docket Number: D497  
Application No.: Unassigned, Group No.: Unassigned.  
Application Filed: Herewith, Examiner: Unassigned.  
Title: Ceramic Ball Bearing Fracture Test Method.  
TO: Commissioner for Patents Washington, DC 20231

THE AEROSPACE CORPORATION, having become the owner of all rights in and to the above-identified application by virtue of an Assignment executed by the inventor(s): Michael J. O'Brien, Benjamin A. Nelson, concurrently with the execution of this application, said Assignment is being submitted herewith for recording; hereby revokes all prior powers and now appoints: Derrick Michael Reid, Registration No. 32,096, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith and before competent International authorities.

SEND CORRESPONDENCE TO:  
Carole A. Mulchinski, M1/040  
The Aerospace Corporation  
2350 East El Segundo Blvd.  
El Segundo, CA 90245 USA

DIRECT TELEPHONE CALLS TO:  
(310) 336-6709

DIRECT FACIMILIES TO:  
(310) 336-0285

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: September, 30, 2003 Signature: Robert Donald Matthews

By: Robert Donald Matthews  
Title: Assistant General Counsel  
For: The Aerospace Corporation  
The Assignee

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ASSIGNMENT TRANSMITTAL ACCOMPANYING A NEW PATENT APPLICATION

First Named Inventor: O'Brien, Michael J. Attorney Dock t Number: D497

Titl : Ceramic Ball Bearing Fracture Test Method.

To: The Director of Patents and Trademarks, Washington, DC 20231

Attention: Assignment Branch

Dear Sir: Please record the enclosed assignment.

1. IDENTITY OF PARTY MAKING TRANSFER:

Inventors: Michael J. O'Brien, Benjamin A. Nelson.

2. IDENTITY OF PARTY TO WHOM TRANSFER IS MADE :

Internal Address: The Aerospace Corporation

P.O. Box 92957

Los Angeles, CA 90009

Street Address: The Aerospace Corporation

2350 East El Segundo Boulevard

El Segundo, CA 90245

3. NATURE OF CONVEYANCE: Assignment

4. EXECUTION DATES:

The enclosed assignment was executed on September , 30 , 2003.

The above mentioned new application filed with the enclosed assignment was executed on September , 30 , 2003.

5. APPLICATIONS AND PATENTS INVOLVED:

The above mentioned new application is the only application or patent involved.

6. FEE DUE: \$40.00 The Commissioner for Patents is authorized to charge assignee's deposit account for the assignment recording fee.

7. DEPOSIT ACCOUNT NUMBER: 01-0428 in the Name of The Aerospace Corporation.

8. ADDRESS TO RETURN ASSIGNMENT AFTER RECORDING BY THE PTO:

Carole A. Mulchinski, M1/040  
Office of the General Counsel  
The Aerospace Corporation  
P.O. Box 92957  
Los Angeles, CA 90009

9. SIGNATURE AND STATEMENT:

To the best of my knowledge and belief, the foregoing information is true and correct.

Respectfully Submitted,

*Derrick Michael Reid*

Derrick Michael Reid  
Registration No. 32,096

The Aerospace Corporation  
P.O. Box 92957 M1/040  
Los Angeles, CA, 90009 USA  
Telephone: (310) 336-6708

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ASSIGNMENT OF PATENT RIGHTS OF AN INVENTION

FOR U.S. Rights and Foreign Rights for a U.S. Patent Application

First Named Inventor: O'Brien, Michael J. Attorney Docket Number: D497

WHEREAS: In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

THE ASSIGNOR(S):

1st Named Inventor: Michael J. O'Brien.

Street Address: 8032 Loyola Blvd.

City, State, Zip, USA: Los Angeles, CA, 90045, USA.

2nd Named Inventor: Benjamin A. Nelson.

Street Address: 1926 West 66th Street.

City, State, Zip, USA: Los Angeles, CA, 90047, USA.

3rd Named Inventor: \_\_\_\_\_.

Street Address: \_\_\_\_\_.

City, State, Zip, USA: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, USA.

4th Named Inventor: \_\_\_\_\_.

Street Address: \_\_\_\_\_.

City, State, Zip, USA: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, USA.

HEREBY sells, assigns, grants, and transfers unto the ASSIGNEE: The Aerospace Corporation, M1/040, 2350 East El Segundo Boulevard, El Segundo, CA 90245, USA, and the successors, assigns and legal representatives of the ASSIGNEE the entire right, title, and interest for the United States and its territorial possessions and in all foreign countries, including all rights to claim priority, in and to any and all improvements which are disclosed in the invention entitled:

Ceramic Ball Bearing Fracture Test Method.

\_\_\_\_\_  
Title of Invention

and which is found in (37 C.F.R. Section 3.21) U.S. patent application executed herewith and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof.

ASSIGNOR her by covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

Page 1/2

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

Date: September, 30, 2003 Signature: \_\_\_\_\_.



1st Named Inventor's Name: Michael J. O'Brien

Date: September, 30, 2003 Signature: \_\_\_\_\_.



2nd Named Inventor's Name: Benjamin A. Nelson

Date: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ Signature: \_\_\_\_\_.

3rd Named Inventor's Name: \_\_\_\_\_.

Date: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ Signature: \_\_\_\_\_.

4th Named Inventor's Name: \_\_\_\_\_.